

EMPIRICAL RESEARCH ON CIVIL DISCOVERY

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INTRODUCTION

Rulemaking is, in large part, about prediction.¹ For example, experience and common sense led different commentators to different predictions about how mandatory disclosure would be likely to work on a national basis.² But rulemaking is also about observation and belief about how the world works now. This paper summarizes the state of the legal system's knowledge—and, to a lesser extent, beliefs—about how the federal civil discovery system works.³ It also notes, in places, what is not known but may be important to an informed decision about changes to discovery rules.

I. BACKGROUND

Broad discovery became available to civil litigants in the federal courts as a result of the adoption of the 1938 Federal Rules of Civil Procedure ("Federal Rules" or "Rules"). One of the themes and aims of the new rules was full disclosure: "Full access to the evidence would end trial by ambush and surprise. Open discovery would promote settlements; with both sides obliged to turn over all their important

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¹ See Laurens Walker, *Avoiding Surprise from Federal Civil Rule Making: The Role of Economic Analysis*, 23 J. LEG. STUD. 569, 574 (1994) (citing, inter alia, MILTON FRIEDMAN, *ESSAYS IN POSITIVE ECONOMICS* 5 (1953) ("Any policy conclusion necessarily rests on a prediction about the consequences of doing one thing rather than another.")).

² See generally, e.g., Griffin B. Bell et al., *Automatic Disclosure in Discovery—The Rush to Reform*, 27 GA. L. REV. 1 (1992); Robert D. Cooter & Daniel L. Rubinfeld, *Reforming the New Discovery Rules*, 84 GEO. L.J. 61 (1995); William W. Schwarzer, *In Defense of "Automatic Disclosure in Discovery"*, 27 GA. L. REV. 655 (1993).

³ Our review of empirical literature does not include new research conducted by the Federal Judicial Center for the Advisory Committee on Civil Rules ("Advisory Committee") in preparation for its September 1997 symposium on discovery nor recent work by the Federal Judicial Center

cards, secrets would disappear and realistic negotiations would occur."⁴ To this utopian end, Rule 26 made generally discoverable, absent a valid privilege, all information relevant to the subject matter of the action.

Another major theme of the new discovery scheme was that discovery was to be left to the lawyers, with minimal judicial involvement in litigation until the trial of the case. Later amendments expanded lawyer control, allowing use of most discovery methods without leave of court or judicial order. Consistent with the theory of discovery as a broad inquiry into relevant matters, the burden of objecting to particular sorts of discovery or particular requests was placed on the party from whom discovery was sought.

Little work was done in the years following the adoption of the original rules or their amendments to determine whether they achieved their desired effect.⁵ By the late 1960s, however, commentators had begun to complain that the discovery rules were not functioning as their drafters had hoped—in particular, they perceived overuse of discovery as a problem. Before considering proposed amendments to remedy these asserted problems, the Advisory Committee on Civil Rules ("Advisory Committee") commissioned the Columbia Project for Effective Justice ("Columbia Project") to conduct a field survey of pretrial discovery in federal courts.⁶

The Columbia Project field survey was the first major inquiry into actual discovery practice in the federal courts and today remains one of the most comprehensive and thought-provoking studies in the area. Fundamental changes were forgone for some time because the Advisory Committee credited the survey's findings that there were no widespread or profound failings in the scope or availability of discovery

("FJC") and RAND Institute ("RAND") pursuant to the Civil Justice Reform Act. Also, although we cite to nonempirical literature on several points, we made no attempt to review all the literature on civil discovery for this paper.

⁴ Maurice Rosenberg, *Federal Rules of Civil Procedure in Action: Assessing Their Impact*, 137 U. PA. L. REV. 2197, 2198 (1989).

⁵ See Laurens Walker, *Perfecting Federal Civil Rules: A Proposal for Restricted Field Experiments*, LAW & CONTEMP. PROBS., Summer 1988, at 69 (only about 30 studies reported during time rules were developed and for 50 years thereafter). See generally DANIEL SEGAL, FEDERAL JUDICIAL CTR., SURVEY OF LITERATURE ON DISCOVERY FROM 1970 TO THE PRESENT: EXPRESSED DISSATISFACTIONS AND PROPOSED REFORMS (1978) (only one entry clearly empirically based); Michael Chiorazzi et al., *Empirical Studies in Civil Procedure: A Selected Annotated Bibliography*, LAW & CONTEMP. PROBS., Summer 1988, at 87 (only nine entries attributed to discovery, three describing different aspects of the same study).

⁶ The findings of that project are reported in WILLIAM A. GLASER, PRETRIAL DISCOVERY AND THE ADVERSARY SYSTEM (1968).

and that the costs of discovery were not oppressive, either in relation to ability to pay or to the stakes of litigation.⁷

Not all observers were equally sanguine about the state of discovery.⁸ Then, and ever since, many decried what they saw as growing problems with discovery. Frequently, the label attached to the complex of perceived problems was "discovery abuse." In a manner reminiscent of the shaping of conventional wisdom about "lawsuit abuse" and the "litigation explosion" (and perhaps by the same mechanisms), perceptions based on potentially unrepresentative experiences coalesced in a widely shared belief that discovery abuse was a pervasive and serious phenomenon.⁹

Indeed, the current reporter to the Advisory Committee has noted that discovery has been on the Committee's docket constantly for three decades, yet "[a]rchingly persuasive complaints continue to be made about the misuse, overuse, and abuse of discovery."¹⁰ If, as is often noted, discovery has become the bulk of the civil litigator's work, it is perhaps not surprising that discovery continues as a major part of the Committee's agenda. But it is fair to ask whether the complaints directed to the Committee actually reflect the reality experienced by most participants in most cases, the memorable nightmares of a few or problems encountered in a small but recurring and important portion of the federal civil docket.

II. SUMMARY AND BRIEF CRITIQUE OF RESEARCH FINDINGS

During the last few decades, the debate over discovery reform has proceeded largely, but not entirely, with reference to salient personal experiences and not with the benefit of empirical evidence.¹¹ Like all

⁷ See FED. R. CIV. P. Part V advisory committee's notes (explanatory statement concerning 1970 amendments of the discovery rules).

⁸ See SEGAL, *supra* note 5, at 10.

⁹ See Linda S. Mullenix, *Discovery in Disarray: The Pervasive Myth of Pervasive Discovery Abuse and the Consequences of Unfounded Rulemaking*, 46 STAN. L. REV. 1393, 1393 (1994); see also Herbert v. Lando, 441 U.S. 153, 179 (1979) (Powell, J., concurring) (discovery is "not infrequently exploited to the disadvantage of justice"); Charles B. Renfrew, *Discovery Sanctions: A Judicial Perspective*, 67 CAL. L. REV. 264, 264 (1979) (abuse of discovery difficult to detect but widespread); John K. Setear, Note, *Discovery Abuse Under the Federal Rules: Causes and Cures*, 92 YALE L.J. 352, 352 (1982) (liberal discovery provisions adopted in 1938 "have given rise to widespread discovery abuse").

¹⁰ Edward H. Cooper, Rule 26: The Scope of Discovery 1 (Oct. 1996) (reporter's notes on discovery reform proposals) (on file with *Boston College Law Review*).

¹¹ Although dated, a few exceptions to the dearth of good research on civil discovery are especially notable, if not "required reading" for those interested in the topic. The first is the report of a field study by the Columbia Project for Effective Justice. See generally GLASER, *supra* note 6. The second is a Federal Judicial Center report, part of the District Court Study Series,

empirical research, these empirical studies vary in utility and generalizability. The most informative studies examine what participants actually do and why they do it, not merely what they say they do or what they think. Of course, any single investigation of discovery activity must focus on a subset of the issues surrounding discovery practice; different questions require different types of methods and sources of information.

Surveys and interviews of attorneys, judges and litigants, studies of court files and studies of law firm files all provide information about discovery useful to policy makers, but all have their limitations. A study of court files, for example, provides only limited information because discovery papers (i.e., requests and responses) often are not filed with the court. Furthermore, such a study does not tap information about discovery activity that takes place outside the formal structure of the Rules. A study of law firm files or surveys of and interviews with attorneys, litigants and judges could provide converging information about formal discovery activity and better information about informal discovery practice. Interviews and surveys may also provide a richness of information that cannot be gleaned from studies of records—examination of court and attorney records can help researchers understand what is happening in discovery but may not reveal why certain things are happening. Unless the surveys and interviews are focused on specific cases, however, those surveyed or interviewed may report commonly held beliefs about discovery practice, many of which may not describe their own experiences.

In addition to surveys, interviews and case file studies, several other types of studies may help address important research issues. One type of study would entail asking attorneys to keep detailed diaries of

that provides a largely quantitative look at federal civil discovery and its relationship to judicial management. See generally PAUL R. CONNOLLY ET AL., *FEDERAL JUDICIAL CTR., JUDICIAL CONTROLS & THE CIVIL LITIGATIVE PROCESS: DISCOVERY* (1978). The third is a series of articles by Wayne D. Brazil reporting on a "pilot study" of 180 Chicago lawyers. The Brazil study, although limited as a source of quantitative information about discovery, is exceptionally rich in detail and illuminating on the issues of the incentives governing civil discovery practice. See generally Wayne D. Brazil, *Views from the Front Lines: Observations by Chicago Lawyers about the System of Civil Discovery*, 1980 AM. B. FOUND. RES. J. 217 [hereinafter Brazil (1980a)]; Wayne D. Brazil, *Civil Discovery: Lawyers' Views of Its Effectiveness, Its Principal Problems and Abuses*, 1980 AM. B. FOUND. RES. J. 787 [hereinafter Brazil (1980b)]. An example of a well-designed study of limited generalizability only because of its limitation to state court cases in Iowa is David S. Walker, *Professionalism and Procedure: Notes on an Empirical Study*, 38 DRAKE L. REV. 759 (1988). A more recent study provides an excellent overview of discovery practice in the state courts. See generally Susan Keilitz et al., *Is Civil Discovery in State Trial Courts out of Control?*, ST. CR. J., Spring 1993, at 8 [hereinafter Keilitz et al. (1993a)]; Susan Keilitz et al., *Attorneys' Views of Civil Discovery*, JUNGES' J., Spring 1993, at 14 [hereinafter Keilitz et al. (1993b)].

discovery activity in a particular case or cases. In addition to merely writing down the discovery activities in which they participated and the time they spent, the attorneys would be asked to describe why they took each step. It would be important for attorneys to describe discovery requests that they propounded as well as ones they received. This method could address the general issue of what discovery activity (informal and formal) actually takes place. It could also address the issue of abuse, to the extent improper motivation is identified as a component of abuse and to the extent attorneys give honest information on this issue. As one would imagine, practical concerns (e.g., about confidentiality) make such research difficult but perhaps not impossible.

Finally, simulation studies, which require research participants to respond to systematically varied, hypothetical situations, could also be used to address a variety of issues. Although they lack some of the hallmarks of external validity, simulation studies could examine the impact of various innovations to the discovery system and identify what different types of clients and attorneys feel to be essential elements of discovery under a variety of different circumstances.

In what follows, we summarize findings of the major empirical studies of federal (and, where relevant, state) civil discovery that have examined the incidence and volume of civil discovery, its problems and abuses, the costs and benefits of discovery, and proposed changes to the discovery system. Detailed reviews of the most important empirical studies on civil discovery were supplied to symposium participants in an appendix to the symposium draft of this article.¹²

A. *Incidence and Volume of Civil Discovery*

Proposals to change the discovery rules reflect beliefs about what discovery practice currently looks like and about why it looks that way. In particular, they reflect assumptions about the interaction of lawyers, litigants and the courts. In this section we describe what empirical research has shown about the nature of these interactions and how they relate to discovery practice.

¹² The appendix is on file with the *Boston College Law Review*. The appendix describes the purpose and methods of the reviewed studies, and criticisms or qualifying information to be considered when interpreting the findings of some of them.

1. Amount of Discovery

Formal discovery actually occurs in fewer cases than uninformed observers might estimate. In the 1978 Federal Judicial Center ("FJC") study of more than 3000 federal civil cases sampled from six metropolitan districts, Paul Connolly and his colleagues found that 72% of the cases had no more than two discovery events, with no formal discovery at all in 52% of the cases.¹³ In the Civil Litigation Research Project ("CLR"), which included both state and federal cases, David Trubek and his colleagues found recorded discovery events in slightly fewer than one-half of the cases.¹⁴ More recent evidence from state courts suggests that this pattern continues to hold: a 1988 National Center for State Courts ("NCSC") study found that no formal discovery occurred in 42% of 2190 cases sampled from five general jurisdiction courts in four states. In the 58% that had some discovery activity, the number of discovery requests ranged from 1 to 88, with a mean of 6.4 and a median of 4.¹⁵

Discovery incidence estimates cannot be compared directly across studies and therefore, do not faithfully reflect differences over time or between jurisdictions. In each study reviewed, researchers made different choices about which case types to include.¹⁶ In a study that includes

¹³ See CONNOLLY ET AL., *supra* note 11, at 28-29. A telephone survey conducted in the same study indicated that about 75% of discovery activity would be reflected in court files. *See id.* at 95. It is not known whether the proportions of formal and informal discovery have changed. The FJC's 1987 District Court Time Study also gives us indirect information about discovery incidence. Attorneys in a sample of recently closed cases were asked several discovery-related questions. Response patterns suggest that discovery occurred in about 72% of these cases. The sample, however, excluded several case types thought to generate discovery only rarely. *See* Summary of Oral Presentation by John E. Shapard to the FJC Research Conference on Civil Discovery Concerning the 1987 FJC District Court Time Study (Sept. 20-21, 1997) (on file with the *Boston College Law Review*). Similarly, in the Columbia Project, which chose cases deliberately to maximize the likelihood of finding discovery activity, discovery was reported by two-thirds of the attorneys in its mail survey. *See* GLASER, *supra* note 6, at 53.

¹⁴ *See* David M. Trubek et al., *The Costs of Ordinary Litigation*, 31 UCLA L. REV. 72, 89-90 (1983). Of the state and federal cases in the study, 46.1% had recorded discovery activity.

¹⁵ *See* Keilitz et al. (1993a), *supra* note 11, at 10. Similarly, Dennis Krystek examined 429 randomly selected tort and contract/commercial cases in one Louisiana parish court and found a like result: 62% of the cases with no more than two events and 44% with none at all. *See* Dennis J. Krystek, *Discovery versus Delay in Civil District Court: A Cross-Sectional Pilot Study of Civil District Court Reveals No Significant Correlation*, 42 LA. B.J. 255, 257 (1994). Walker reported that of 1400 Iowa state civil cases studied, only 24% had any formal discovery. *See* Walker, *supra* note 11, at 781, 824.

¹⁶ For example, the 1978 FJC study covered almost the full range of federal litigation, including prisoner cases, which have little discovery (*see* CONNOLLY ET AL., *supra* note 11, at 85 & n.171); Keilitz excluded cases she deemed unlikely to have discovery (*see* Keilitz et al. (1993a), *supra* note 11, at 16 n.14); Krystek excluded everything except tort and contract/commercial

a court's entire caseload, discovery rates will be low and many cases in the sample will shed no light on other discovery-related issues of interest. Indeed, discovery researchers have needed to eliminate large classes of litigation from their samples just to get enough cases to study the asserted problems. A sampling strategy designed to create a rich source of information about discovery by uncovering high-discovery or problem-discovery cases is suitable for much discovery research, but does not provide a solid basis for estimating discovery incidence rates for civil litigation as a whole.

The total volume of discovery is likewise lower than often assumed. Cases involving extensive discovery are in fact relatively rare—the studies using actual file reviews uncovered very few cases involving more than ten discovery requests, perhaps 5–15% depending on the sampling method. In the 1978 FJC study, less than 5% of the case files examined recorded more than ten discovery requests; of cases with at least some discovery, 90% had no more than ten requests.¹⁷

2. The Relationship of Discovery to Case Characteristics

Studies based on court records show that both discovery incidence (whether any discovery is undertaken) and discovery volume (how many discovery requests are made) are generally related to case complexity, with complexity evidenced by various case characteristics.¹⁸ As would be expected, the type of case or area of law involved affects the incidence and volume of discovery. Glaser reported that personal injury cases were more likely than commercial cases to involve at least one discovery request, but that commercial litigation—particularly patent and antitrust cases—generated more discovery work.¹⁹ Connolly

cases (see Krystek, *supra* note 15, at 257); and Walker excluded only domestic relations cases (see Walker, *supra* note 11, at 770 n.65). The object of the CLRP study was to describe "ordinary" litigation. Accordingly, 37 "mega" cases (all federal) were excluded from the sample, as were all cases in which less than \$1000 was in controversy. See Trubek et al., *supra* note 14, at 80–82. The Columbia Project excluded many case types from its mail survey to focus on major types of civil litigation and purposively sampled high-discovery case types for its interviews. See GLASER, *supra* note 6, at 45–48.

¹⁷ Put another way, of the 3114 cases examined, 152 had more than 10 requests. The average number of requests in these 152 cases was 17.5. See CONNOLLY ET AL., *supra* note 11, at 28–29. Similarly, Walker found that less than 5% of cases entailed more than five discovery events and less than 3% involved more than nine. See Walker, *supra* note 11, at 781, 824. The NCSC study cases were also clustered in the low-discovery category; of the cases with any discovery, only 14% had more than 10 requests. See Keilitz et al. (1993a), *supra* note 11, at 10–11.

¹⁸ But this may become tautological—high discovery activity is sometimes used as evidence of complexity.

¹⁹ See GLASER, *supra* note 6, at 73. Walker reported that in Iowa state courts, products liability, professional malpractice and non-automobile personal injury and property damage cases were

reported that in federal court both incidence and volume were relatively high in securities; trade regulation, tort, intellectual property, admiralty and contract cases. High discovery volume (more than ten requests) was much more likely to occur in product liability, patent and franchise contract cases.²⁰ Other case characteristics that affect discovery activity are the number of separately represented parties,²¹ the number of claims (including counterclaims and cross-claims)²² and the amount at stake.²³

B. *Benefits of Discovery*

What role does discovery play in securing the "just, speedy, and inexpensive determination" of civil actions? The premise that, all things being equal, "more is better" (i.e., the more information litigants have, the greater the likelihood of a just outcome)²⁴ has come under attack on two fronts. First, some take issue with the fundamental claim, asserting that information availability sometimes leads to unjust results, as where parties settle rather than risk the public disclosure of damaging but arguably irrelevant information. More common is the second criticism, that all things are seldom equal and a liberal discovery system

most likely to involve at least one discovery request. See Walker, *supra* note 11, at 823. More recently (and somewhat contradictorily) Keilitz reported that vehicle tort, malpractice/product liability and other tort cases were most likely to have at least one discovery request, with the average number of requests being substantially higher in malpractice/product liability cases (11.5) than in vehicle tort (5.3) or other tort (7.5). See Keilitz et al. (1993a), *supra* note 11, at 12.

²⁰ See CONNOLLY ET AL., *supra* note 11, at 43-44. For an explanation of the amount and nature of discovery activity observed in products liability cases, see generally Francis H. Hare, Jr. and James L. Gilbert, *Discovery in Products Liability Cases: The Plaintiff's Plea for Judicial Understanding*, 12 AM. J. TRIAL ADVOC. 413 (1989).

²¹ Cases with more than two parties tend to generate more discovery. The NCSC study found that 53% of cases with two parties involved discovery, with an average of 4.9 requests. For cases with three parties, these numbers climbed to 69% and 7.8 requests. For cases with four or more parties, the corresponding numbers are 75% and 15 requests. See Keilitz et al. (1993a), *supra* note 11, at 12. In the FJC study, in cases with some discovery, there was a steady increase in the proportion of high- and moderate-volume discovery cases as the number of parties grew. Each additional party increased the mean number of discovery requests by 1.05. See CONNOLLY ET AL., *supra* note 11, at 43-46. Of course, the number of recorded discovery requests does not always signal the number of discovery events. In multiparty litigation, for example, a single deposition may involve questioning by several parties, each filing its own deposition notice.

²² See CONNOLLY ET AL., *supra* note 11, at 46-47. Cases with counterclaims averaged 2.2 more discovery requests than those without counterclaims; for cases with cross-claims, this difference was 2.8 requests. See *id.* at 47.

²³ The relationship between discovery and stakes is discussed more fully in Section II.B.

²⁴ See Maurice Rosenberg & Warren R. King, *Curbing Discovery Abuse in Civil Litigation: Enough is Enough*, 1981 BYU L. REV. 579, 581.

often imposes burdens on discovery respondents that are disproportionate to the benefits of the discovery.

Researchers have examined the proportionality and sufficiency of discovery by examining (1) the level of discovery activity in relation to the stakes of cases; (2) how discovery needs relate to discovery actually had; and (3) the relationship of discovery to case outcome.

1. The Level of Discovery Activity and the Stakes of Cases

Some studies have found both discovery incidence and volume to be related to the stakes of the case. Glaser found that the incidence of discovery was related to attorneys' predictions of the amount that would be recovered. Only two-thirds of respondents who predicted recovery of \$2500 or less used discovery, whereas 75% of those predicting recovery between \$2500 and \$40,000 used discovery, and 92% of respondents predicting recovery of more than \$40,000 did so.²⁵ In Walker's Iowa study, the volume of discovery was related to the amount in controversy—cases with more than twenty requests were more likely to be cases with higher amounts in controversy.²⁶ But the relationship between stakes and discovery activity does not appear to be straightforward. For example, Trubek concluded that the stakes of the case did not directly drive investments of time and money, but rather put a cap on the number of lawyer hours invested.²⁷

Brazil divided his sample of attorneys into "subworlds" of small-case attorneys (those whose cases had a median value of \$25,000 or less) and large-case attorneys (those whose cases had a median value of \$1,000,000 or more). He found that among small-case attorneys, discovery played a less dominant role in the litigation process than it did among large-case attorneys. Small-case attorneys used discovery less often and less intensively, devoted a lower percentage of total billable time to discovery than did large-case attorneys and committed

²⁵ See GLASER, *supra* note 6, at 56. Connolly found no relationship between amount in controversy and discovery activity in the 1978 FJC study, but the authors attribute this to the fact that their amount-in-controversy measure was limited to the plaintiff's *ad damnum* clause, a notoriously bad indicator of the actual amount at stake. See CONNOLLY ET AL., *supra* note 11, at 40 & n.95, 47–51.

²⁶ See Walker, *supra* note 11, at 790, 828.

²⁷ See Trubek et al., *supra* note 14, at 95–96. Our reanalysis of the Walker data similarly indicates that the median number of discovery requests is low in cases at all dollar amounts in controversy, but it also indicates that variability in the number of requests is greater at the larger dollar amounts. See Walker, *supra* note 11 (review is in appendix on file with the *Boston College Law Review*).

higher percentages of their time to investigations, negotiations and trials.²⁸

2. How Discovery Needs Relate to Discovery Actually Had

Most of the literature on civil discovery has concentrated on the relationship between discovery and the "speedy and inexpensive" determination of civil actions. What role does discovery play in securing "just" determinations? None of the research we examined attempted to measure justness of outcome or the utility of discovered information in obtaining it. If, however, we accept the premise that fuller exchange of relevant information is likely to lead to more just outcomes, both the Columbia Project and the Brazil study of Chicago lawyers shed some light. In the Columbia Project, researchers asked attorneys about whether they thought the use of discovery helped or hindered a just disposition. Among the lawyers, 78% said discovery helped, and 21% (mostly losers at trial) said it made no difference. Only about 1% said it was a hindrance.²⁹

As part of his inquiry, Brazil asked about information left undiscovered by opponents. Ninety-six percent of the lawyers reported having settled a case while still possessing "arguably significant" information that opposing counsel had failed to discover. Lawyers whose median case size was \$1,000,000 or more reported that this occurred in one of every two settlements; lawyers whose median case value was \$25,000 or less reported such settlements less often, in one of four settlements.³⁰ Seventy-nine percent reported trying a case to comple-

²⁸ See Brazil (1980a), *supra* note 11, at 223. Brazil also subdivided his sample of attorneys in several other ways that tended to differentiate between small-case and large-case attorneys. See Brazil (1980b), *supra* note 11, at 791, 802-04, 895-902. The subgroupings were based on substantive practice area (attorneys who included automobile personal injury among the principal type of cases handled versus those who included antitrust or securities matters), proportion of cases brought in federal court (attorneys bringing 20% or fewer of their cases in federal court versus those bringing 80% or more), client type (attorneys who spent 50% or more of their time in the employ of individuals versus 50% or more of their time in the employ of corporations) and firm size (attorneys practicing in firms of five or fewer attorneys versus those practicing in firms of 120 or more). The defining characteristics of the subgroups were highly correlated with one another. For instance, the antitrust lawyers brought an average of 81% of their cases in federal court and had a median case value of \$998,000. In contrast, auto personal injury lawyers brought an average of 5% of their cases in federal court and had a median case value of \$25,000. Not all of the subgroupings account for the entire sample of attorneys. For example, only 56% of the attorneys interviewed fell into one of the two categories based on median case value. Accordingly, it is unclear how the nature of discovery conducted by those who handle cases in the mid-range compares to that conducted by those handling small- and large-value cases. See *id.*

²⁹ See GLASER, *supra* note 6, at 112.

³⁰ See Brazil (1980b), *supra* note 11, at 811.

tion while opposing counsel had failed to discover something of arguable importance.³¹ Similarly, 88% of the attorneys reported settling a case suspecting that the opposition had not disclosed something of arguable importance.³²

Brazil also found:

- Eighty-three percent of the attorneys reported having been surprised with undiscovered information at trial, but the rate of occurrence was fairly low (10% of trials).³³

- Overall, 95% of respondents indicated that at some point in their practice, the way they had prepared a witness for deposition had resulted in the opposing counsel's failing to discover significant information. Respondents estimated that in 50% of their cases, witness preparation had induced a failure of discovery.³⁴

- Eighty-one percent indicated that they had, at least once, made an early settlement offer to prevent the discovery of damaging information. But the frequency with which these attorneys engaged in this practice was low.³⁵

- Although most attorneys (81%) could recall refraining from pursuing some information because of the cost of doing so, most reported that this was a fairly rare occurrence (the median response regarding the percentage of cases in which this happened was 20%).³⁶

Brazil describes in detail how the frequency of the above events varied by subgroup membership. Generally speaking, large-case attorneys reported that discovery is less likely to be successful in the sense that the parties' discovery efforts often fail to dislodge all the significant information.³⁷

3. The Relationship of Discovery to Case Outcome

There is some evidence that discovery is not cost-effective for all parties. In the CLRP, Trubek concluded that for plaintiffs, increased

³¹ See *id.* at 813. In the Columbia Project, respondents in cases in which one or both sides engaged in discovery were more likely to report that all relevant evidence came out at trial and that no extraneous witnesses were called. On the other hand, attorneys in these cases were somewhat less likely to report that no irrelevant evidence was offered or that no extraneous issues were presented by either side. But, as the author pointed out, no-discovery trials are rare (13 cases in the project's sample), so conclusions from these findings must be tentative. See GLASER, *supra* note 6, at 104-05.

³² See Brazil (1980b), *supra* note 11, at 816.

³³ See *id.* at 817-18.

³⁴ See *id.* at 819.

³⁵ See *id.* at 821-22.

³⁶ See *id.* at 839-40.

³⁷ See Brazil (1980b), *supra* note 11, at 816.

lawyer time spent on discovery was associated with *decreased* measures of success.³⁸ Similarly, Glaser in the Columbia Project concluded that discovery is less profitable for plaintiffs. The more days plaintiffs spent in discovery, the lower their recovery relative to expectations. For defendants, the number of days spent in discovery was independent of the amount they were ultimately liable to pay.³⁹

Glaser found that attorney satisfaction with case outcomes was unrelated to whether or not the attorney had engaged in discovery. This was true whether the case settled or went to trial and, for those who went to trial, whether the attorney won or lost. Client satisfaction, as reported by their attorneys, was likewise unrelated to the occurrence of discovery, except that defendants who lost at trial reported slightly more satisfaction when their attorneys had engaged in discovery.⁴⁰

Glaser also found that, despite attorneys' convictions that discovery hastens settlement, cases with more discovery were actually less likely to settle. The number of days spent in discovery was associated with both increases in the number of disagreements between the sides concerning factual and legal issues and lower proportions of cases settling before trial. Cases where neither side engaged in discovery settled out of court in 97% of the cases. The corresponding proportion for cases where both sides discovered was 76%. As the value of the cases rose, the anti-settlement effects of discovery increased. These effects remained even after statistical controls for case complexity and case size were employed, perhaps suggesting that sunk costs substantially affect settlement behavior.⁴¹

C. *Costs of Discovery*

1. Litigant Costs

Incidence and volume of discovery events are only crude measures of the costs and burdens of litigation. Counting depositions, the number of interrogatories or even the number of information items actually requested tells us fairly little about the time and expense required either to propound discovery or to respond to it. The actual costs of discovery have rarely been quantified in empirical studies, and the studies reviewed are too dated on this point to be directly applicable

³⁸ See Trubek et al., *supra* note 14, at 110–16. Success was measured by the relationship of recovery to legal fees incurred, not purely by the likelihood of winning or losing at a trial. *See id.*

³⁹ See GLASER, *supra* note 6, at 90–91.

⁴⁰ *See id.* at 112–13.

⁴¹ *See id.* at 91–100.

to current conditions. Comprehensive cost studies are complicated by different fee arrangements and particularly by the methodological question of how to treat discovery costs incurred by lawyers in zero- or low-recovery contingent fee cases. The few studies that have attempted to describe discovery cost are perhaps more illustrative of the difficulties of such research than of the actual cost picture, but they are worth examining.⁴²

The Columbia Project report gives us some idea of how discovery costs are distributed and how they relate to overall costs and to case type, although the report is seriously dated on cost issues.⁴³ In that project, both absolute discovery costs and the relationship of discovery costs to total costs varied by case type and sometimes by party. The researchers found that discovery costs were an appreciable component of total fees across the range of cases studied, but were especially high for certain case types. For example, in antitrust actions, discovery represented 65% of plaintiffs' costs and 63% of defendants' costs. But in patent cases, discovery accounted for 21% of plaintiffs' costs and 54% of defendants' costs. Over all case types, defendants tended to have higher costs on average, but plaintiffs' costs were more variable, and the highest costs were consistently borne by plaintiffs.⁴⁴

Particularly interesting for the debate about curtailing over-discovery as an abuse inflicted on parties from whom discovery is sought is the finding that both sides spent more generating their own discovery requests than responding to those of their adversaries. This cost differential was greater for plaintiffs than for defendants, but overall, defendants spent more than plaintiffs both generating their own discovery requests and responding to those of their adversaries in the median cases. Estimated discovery costs were also found to be related to the stakes of the case—as the plaintiffs' expected recovery rose, so did the medians of both defendant and plaintiff costs attributable to discovery.⁴⁵

⁴² The methodological difficulties inherent in measuring discovery activity are detailed in Patricia Lombard, *The Baltimore Discovery Survey* (unpublished Federal Judicial Center staff paper) (summary by Elizabeth C. Wiggins and Molly T. Johnson on file with the *Boston College Law Review*). See Trubek et al., *supra* note 14, at 82–85 (the CLRP looked at the cost of “ordinary” litigation) (study described in more detail *infra* note 48 and accompanying text).

⁴³ For example, the mail survey portion of the study indicated that the median total discovery cost was \$250 for plaintiffs and \$400 for defendants. See GLASER, *supra* note 6, at 166.

⁴⁴ See *id.* at 162–77.

⁴⁵ See *id.* at 171–72; see also F.R. Lacy, *Discovery Costs in State Court Litigation*, 57 OR. L. REV. 289, 297–99 (1978) (finding that the cost of discovery generally increased with the amount in controversy). The Brazil findings regarding the relationship between cost and case characteristics are discussed in more detail *supra* note 28 and accompanying text.

In part because of the noncomparability of cost and fee information between contingent and hourly-fee cases and across regions, the Columbia Project researchers concluded that lawyer time is a more meaningful measure of the cost-generating burdens of discovery.⁴⁶ (Lawyer time does not directly indicate the cost to litigants. This is a problem for interpreting data not only from contingent-fee cases, but from high-volume, big-firm cases in which discovery may be used as a training ground for new attorneys. Total lawyer time and amounts "billed" are of some interest, but if substantial portions of that time are written off by the firm, these measures do not accurately reflect the cost burden to litigants.) To estimate burden, the Columbia Project researchers divided the number of days spent in discovery by the total number of days spent on a case and found that the proportion of litigation time spent in discovery was about 43% for heavy discovery cases, but only 25–31% in the average case.⁴⁷

In the CLRP, Trubek studied costs in "ordinary" litigation—the vast middle segment of litigation in which more than \$1000 was in controversy but in which neither the amount in controversy nor other case features led the researchers to classify them as "mega" cases. The median total lawyer time spent was 30.4 hours per case. Of this time, the activity accounting for the most lawyer time was discovery, but that time was only 16.7% of the total time, or a little more than five hours. Two other activities accounted for similar amounts of attorney time, "conferring with client" (16%) and "settlement discussions" (15.1%).⁴⁸

Normative decisions about discovery burden allocation, whether case-by-case or system-wide, may require some knowledge of the extent to which a heavy discovery burden is self-imposed. A corporation's document production may be more time-consuming, and therefore more expensive, when its records are poorly organized. Similarly, its expenses for document production will be higher if it requires paralegals to number, index and scan every corporate document for CD-ROM imaging. The fact that a party producing discoverable information spends a lot of money in the process is only one part of the analysis; policymakers may not want to alleviate or shift responsibility for self-inflicted costs or those associated with the producing party's own trial preparation.

⁴⁶ See GLASER, *supra* note 6, at 167.

⁴⁷ See *id.* at 71, 73, 196. The project researchers also asked about direct discovery costs other than lawyer time (e.g., transcripts), but concluded that lawyers' fees are by far the largest discovery cost, particularly in heavy-discovery cases. See *id.* at 167–70, 176, 200–01.

⁴⁸ See Trubek et al., *supra* note 14, at 90–91.

Discovery may impose other costs: lost productivity, lost opportunities and lost business advantage because proprietary information is disclosed, among others. No study has attempted to quantify such effects, although respondents in the Brazil study mentioned them, and it may fairly be presumed that such costs enter into the perception of discovery problems elicited in polls of corporate litigants and their counsel.

2. Judicial System Costs

Little data exist on the costs of discovery to non-litigants,⁴⁹ but we do have some information on the amount of judicial time associated with it. The FJC's most recent district court time study found that about 5% of the case-related time of district judges is spent on discovery matters (including scheduling and management efforts as well as discovery motions, protective orders and the like). For magistrate judges, the figure is about 13%.⁵⁰

D. *Incidence and Nature of Discovery Problems and "Abuse"*

Observers of the civil justice system differ in their assessments of the nature and amount of problem discovery. Attorneys, judges, litigants, rulemakers, researchers and others may all have different perceptions of what is proper discovery, what is legitimate but problematic discovery and what is abusive discovery. Some focus on intentional behavior as an element of abuse and might define it to include violations of the rules of procedure, violations of standards of professional responsibility and transgressions of professional and social courtesy. For example, some consider it abusive for an attorney to plan service of a discovery request for the eve of an opponent's two-week vacation, even though neither the content nor the timing of the request violates any rules. Others take a purely economic view of discovery abuse, finding it wherever the transaction costs of the discovery exceed the value of the discovered information in resolving the dispute.⁵¹

⁴⁹ But for a description of some of the burdens discovery places on third-party witnesses such as non-testifying scientific experts, see Elizabeth C. Wiggins and Judith A. McKenna, *Researchers' Reactions to Compelled Disclosure of Scientific Information*, LAW & CONTEMP. PROBS., Summer 1996, at 75-91.

⁵⁰ See John E. Shapard, Oral Presentation at Federal Judicial Center Research Conference on Civil Discovery (Sept. 1991) (summary on file with *Boston College Law Review*).

⁵¹ See, e.g., Cooter & Rubinfeld, *supra* note 2, at 63. While a potentially useful benchmark for inefficient discovery, using the label "abuse" in these circumstances seems to connote intentional behavior to no good purpose.

In his report of the Columbia Project, Glaser adopted a behavioral rather than an economic framework and described two major categories of discovery abuse: "pushing" and "tripping." The most typical examples of "pushing" offenses are over-discovery and discovery for improper purposes. In this study, "pushing" offenses, such as using discovery to harass, were reported to be relatively rare. Only 15% of lawyers thought their opponents used discovery in a harassing manner even to a slight extent. But "fishing," which was not defined as abusive, was complained of by 56% of the plaintiffs' lawyers and 59% of defense attorneys.⁵²

"Tripping" offenses are typically committed by parties from whom discovery is sought; they include evasion, failure to cooperate with discovery and even spoliation.⁵³ "Tripping" offenses, particularly impeding or delaying discovery, were more commonly complained of than "pushing" offenses. Evasive or late interrogatory responses were the primary culprits.⁵⁴

In the vast majority of cases, discovery appears to be the self-executing system the rules contemplate. Most incidents of "problem" discovery, as perceived by lawyers, do not result in any formal request for relief. If measured by formal objections, discovery motions activity or sanctions requests, discovery problems do not appear to be extreme.⁵⁵ Walker's review of Iowa cases, for example, revealed that in 80% of the cases with interrogatories, requests for production or requests for admission, no objections were filed, and in two-thirds of them, no discovery motions activity occurred.⁵⁶

Like volume, the contentiousness of discovery and the incidence of problems are related to certain characteristics of cases and their participants, as we describe in the following sections. It is important to note, however, that no research separates the possibly co-occurring factors sufficiently to reach valid conclusions about the role each factor plays in the discovery picture. Suppose, for example, that large anti-

⁵² See GLASER, *supra* note 6, at 118.

⁵³ See generally JOSEPH L. EBERSOLE & BARLOW BURKE, FEDERAL JUDICIAL CTR., *DISCOVERY PROBLEMS IN CIVIL CASES* 74 (1980) (using similar categories, "overdiscovery" and "resistance," the authors report that resistance was more likely than over-discovery to trigger judicial intervention).

⁵⁴ See GLASER, *supra* note 6, at 140. Glaser provides additional information and speculation about patterns of seeking judicial relief. See *id.* at 140-48.

⁵⁵ See *id.* at 117-23. "The overwhelming majority of attorneys do not report aggressive pushing." *Id.* at 120. As the author notes, however, evaluations of whether the number of reported problems is "too high" or "gratifyingly small" depends on one's presuppositions about the system's operation. *Id.* at 120.

⁵⁶ See Walker, *supra* note 11, at 786-87.

trust cases give rise to a lot of discovery and a lot of discovery problems and that they are usually handled by big-firm litigators. Case type, amount at stake and attorney/law firm characteristics are confounded and we do not know which factor actually predicts heavy or abusive discovery. A reader of the empirical information we summarize here should keep these kinds of likely confounds in mind.

1. Discovery Problems and Their Relationship to Case Characteristics

The factors associated with higher discovery volume are also associated with a higher likelihood that problems will arise. Both case file reviews and attorney surveys and interviews support this conclusion.

From his interviews, Brazil concluded that larger and more complex cases tend to exhibit the following characteristics: (1) discovery consumes a very substantial, often dominating percentage of the resources committed to the entire litigation process; (2) discovery tools are likely to be used more extensively and intensively; (3) tactical considerations are more likely to affect decisions about discovery, and tactical maneuvering is likely to play a substantially larger role in the discovery process; (4) discovery is less likely to be successful in the sense that the parties' discovery efforts often fail to dislodge all the significant information from their opponents; (5) the attorney-client privilege, the work-product doctrine, and other doctrinal sources of protection of information are likely to be invoked more frequently and their invocation is more likely to provoke costly disputes; (6) clients are more likely to play an active role in making decisions about discovery matters and more likely to exert pressure on counsel both to resist complying with some discovery requests and to use discovery tools to retaliate against or harass opposing parties.⁵⁷

Walker's study of case files shows that case type makes a difference: he found that parties made discovery motions, generally rare in his sample, in 40% of the professional malpractice cases and half of the products liability cases in the sample. Auto accident cases, conversely, spawned discovery motions only 20% of the time.⁵⁸

Similarly, high-stakes cases tend to produce more discovery motions.⁵⁹ Keilitz asked lawyers to rate the degree to which each of ten named factors predicted discovery problems in a case. The only case-

⁵⁷ See Brazil (1980a), *supra* note 11, at 229-30.

⁵⁸ See Walker, *supra* note 11, at 788.

⁵⁹ See *id.* at 788-89 (of the discovery motions filed, nearly half were in cases seeking \$100,000 or more or an unspecified "fair and adequate" relief).

related characteristic the responding lawyers frequently associated with discovery problems was "large size of claim or money damages sought."⁶⁰

In general, then, as stakes, number of parties, number of claims and case duration increase, both discovery activity and the incidence of discovery-related friction between the parties increase.⁶¹ It is impossible to determine with confidence whether the higher incidence of problems in these circumstances tells us anything qualitative about the nature of discovery in these cases or is merely a function of the fact that more discovery requests and events create more opportunities for problems. But Brazil's work suggests that increased interaction alone may not completely explain the higher levels of discovery-related friction in large cases.⁶²

2. The Relationship of Discovery Problems to Participant Characteristics

Discovery is also affected by the participants' personal characteristics and incentives. Unlike conclusions about the effects of case characteristics, which are often supported by case file review, the asserted relationship between discovery practice and personality or economic incentives is typically either theoretical or based on opinion surveys.

a. Attorneys

How do lawyer characteristics shape discovery practice? Hunches abound—various commentators have posited potential causes of discovery problems: inadequate education, training and supervision of new attorneys; greed or pressure for billable hours; fear of under-discovery (and perhaps of malpractice); fear of appearing weak or too cooperative; fear of going to trial; decreased civility and collegiality of the bar; or even a more adversarial climate in American society in general.

The data that support these speculations come primarily from opinion surveys about the causes of discovery problems. For example,

⁶⁰ See Keilitz et al. (1993b), *supra* note 11, at 35. More frequently reported as predictive of problems were characteristics of participants in the litigation. See *infra* note 63 and accompanying text.

⁶¹ In the 1978 FJC study, as discovery activity increased, Rule 37 motions to compel and for sanctions, and motions for protective order, increased as well. See CONNOLLY ET AL., *supra* note 11, at 34.

⁶² See Brazil (1980a), *supra* note 11, at 235–37.

Keilitz found that surveyed attorneys rated "personality or style of the opposing attorney(s)" the best predictor of discovery problems, followed by inexperience of the opposing attorney and animosity between the parties.⁶³ Brazil's detailed interviews revealed that lawyers with well-defined specialty practices believed discovery went more smoothly when the opposing counsel was also a specialist in the field of law, working in the same region.⁶⁴ His respondents also offered some of the usual complaints about opposing attorneys conducting discovery just to run up the bills, overproducing or simply being unable to adapt their usual discovery routine to the needs of the case.⁶⁵ No systematic case file review, however, has been linked with assessments of the subjective factors described above.

Much of the literature on incentives affecting discovery practice is rooted in economic theory.⁶⁶ Yet, there is little information about how lawyers actually make discovery decisions. Law firms differ in how they handle discovery, and analyzing these differences and their implications could help identify the factors that influence the burdens of discovery. The same discovery tasks that associates or paralegals handle in one firm may be done by a partner in another firm, or by outside support personnel in a third. Differences in firm organization and practice area may lead to some firms being high-discovery-cost firms and others being low-discovery-cost firms. Although both the Columbia Project and the CLRP attempted to get a sense of the relationship between attorney compensation structures and discovery, the work on this point must be considered preliminary. And no study even attempts to determine whether a rule-based response to perceived discovery cost problems (e.g., presumptive limits on depositions or interrogatories) would be superior to letting the free-market system operate (e.g., as when clients negotiate flat, rather than hourly, fee arrangements with their counsel).

b. Clients

A less common explanation for problems with discovery practice, but one that underlies some proposed changes to the system, is that attorneys' actions are shaped by their clients' desires to impose costs on opponents to punish them or to force them to settle, to delay resolution of the case, to discourage suits by other potential opponents,

⁶³ See Keilitz et al. (1993b), *supra* note 11, at 35-36.

⁶⁴ See Brazil (1980a), *supra* note 11, at 240-43.

⁶⁵ See *id.* at 235-40.

⁶⁶ See, e.g., Cooter & Rubinfeld, *supra* note 2, at 62-64, 69-76.

to conceal or destroy unfavorable evidence or to protect trade secret, confidential or otherwise sensitive information. There is relatively little empirical work on how clients affect the discovery decisions of their lawyers. Brazil's work suggests that client pressures are more likely to be felt by large-case litigators and lawyers who act as, or directly with, in-house corporate counsel.⁶⁷

c. Judges

Discovery reform proponents have often assumed that certain problems with discovery practice stem from insufficient or ineffective case management and that more or different judicial management techniques would effectively control the nature and scope of discovery. Three types of studies have addressed the validity of these assumptions. The first type is exemplified by Connolly's study. This study examined the effect of different levels of judicial control over discovery on the duration of the discovery period and volume and pattern of discovery. He concluded that higher levels of judicial control resulted in closer conformity to rule provisions specifying time limits for responses to requests and reduced the time between requests. The time savings were not achieved at the cost of observable interference with quantity or choice of discovery requests.⁶⁸

Other studies have asked attorneys about their perceptions of the judge's role in preventing discovery problems. For example, in his interviews of Chicago attorneys, Brazil found a high level of disappointment with judges' failure to prevent discovery problems. When asked in an open-ended question to identify problems in the discovery system, 71% of those interviewed mentioned something negative about the role of the courts. Sixty-nine percent of all those interviewed, and 93% of big-case litigators, said they did not get "adequate and efficient help from the courts in resolving discovery disputes and problems." Those interviewed also expressed frustration with judicial reluctance to impose sanctions, and noted that when sanctions were imposed, they were frequently too mild to affect attorneys' cost-benefit calculations. Eighty percent of those interviewed favored increased judicial use of the sanctioning power.⁶⁹ More recently, Keilitz reported how attorneys in four state court jurisdictions rated the importance of six factors

⁶⁷ See Brazil (1980a), *supra* note 11, at 230; Brazil (1980b), *supra* note 11, at 859-62.

⁶⁸ See CONNOLLY ET AL., *supra* note 11, at 52.

⁶⁹ See Brazil (1980a), *supra* note 11, at 245-51; Brazil (1980b), *supra* note 11, at 862-69.

that might inhibit them from seeking court enforcement of discovery rules.⁷⁰ In two jurisdictions (Boston and Kansas City), attorneys rated the item "court is unwilling to resolve discovery disputes" first in importance; attorneys in the other two jurisdictions (New Haven and Seattle) ranked the item second. Attorneys' perceptions that the court "is reluctant to impose costs in favor of the prevailing party" also figured prominently in their reasons for not seeking judicial relief when discovery problems arose.⁷¹

The third type of study that is relevant asked participants in the discovery system to rate the effectiveness of procedures that augment or diminish judicial control over discovery. These studies are described in the next section.

E. *Evaluating Changes and Proposed Changes to Discovery Practice*

Several surveys have asked attorneys and judges to rate the desirability of various changes to the discovery system. In its 1992 Long Range Planning Survey, the FJC asked federal judges whether they supported or opposed eight policy directions.⁷² Approximately two-thirds of the district judges moderately or strongly supported an increase in sanctions for bad-faith discovery responses (e.g., illegitimate privilege claims or evidence destruction). Almost three-fourths strongly or moderately supported requiring parties to disclose, before formal discovery, any material, non-privileged information *favorable* to their claims or defenses; only a slight majority supported the mandatory disclosure of *unfavorable* information. (Not surprisingly, then, only about a third supported leaving the discovery rules as they were before Rule 26 was revised to include "disclosure"—a revision that was pending at the time of the survey.) Only slightly more than half of the district judges moderately or strongly supported one measure designed for more complex litigation—the increased use of phased discovery in multiple-issue cases—but more than three-fourths favored document depositories in mass litigation. Finally, only about half supported the elimination of local variation in discovery rules.⁷³

Keilitz asked attorneys to rate eight proposed discovery reforms according to their likely effectiveness in controlling the discovery proc-

⁷⁰ See Keilitz et al. (1993b), *supra* note 11, at 36–37.

⁷¹ See *id.* at 37.

⁷² See FEDERAL JUDICIAL CTR., PLANNING FOR THE FUTURE: RESULTS OF A 1992 FEDERAL JUDICIAL CENTER SURVEY OF UNITED STATES JUDGES 35 (1994).

⁷³ See *id.*

ess. The most favored reform generally was "Impose Costs/Sanctions," followed by "Early Conference/Discovery Plan."⁷⁴ Describing the implications of their findings for several proposed reforms, Keilitz noted that because a substantial minority (42%) of cases are resolved without any formal discovery, automatic disclosure rules might actually increase the burdens on many parties.⁷⁵ They also noted that imposing presumptive limits on the number of depositions is likely to affect only a small number of cases.⁷⁶ (None of the cases in their sample featured more than ten depositions until the overall number of discovery requests exceeded twenty.) In addition, they found that the existence of a requirement that attorneys confer in good faith to resolve discovery disputes before filing motions bore no consistent relationship to the actual number of discovery motions and rulings. Accordingly, they expressed doubt about whether such a requirement minimizes discovery costs.⁷⁷

Brazil also questioned attorneys about possible changes in the judge's role in discovery, the scope of discovery and the attorney-client privilege.⁷⁸ More than half of the respondents favored greater judicial involvement; an overwhelming majority favored the judges more aggressively imposing sanctions. Respondents were generally in favor of leaving the scope of discovery and the attorney-client privilege alone.

Although surveys such as the above are useful, studies that describe the existing discovery system might better identify the need for a change to discovery practice and the likely impact of that change. The Connolly report, for example, recommended a model for judicial case management based on its observations of discovery practice.⁷⁹ Connolly recommended the use of two control tracks—a motions control track for cases unlikely to involve discovery and a discovery control track. The latter track would set a deadline for the completion of discovery and a date for the pretrial conference immediately upon joinder of the issues, and it would allow enlargements of the discovery period only on a showing of active discovery during the initial period and a specific need for more discovery. At the time of the study, these

⁷⁴ See Keilitz et al. (1993b), *supra* note 11, at 39. Other reforms that were rated include "Individual Calendar," "Use Standardized Questions," "Limit Scope of Allowable Discovery," "Consistent Application of the Rules," "Encourage Cooperation Between Lawyers" and "Limit the Time Frame." See *id.*

⁷⁵ See Keilitz et al. (1993a), *supra* note 11, at 14–15.

⁷⁶ See *id.* at 15.

⁷⁷ See *id.*

⁷⁸ See Brazil (1980a), *supra* note 11, at 245–51; Brazil (1980b), *supra* note 11, at 862–69.

⁷⁹ See CONNOLLY ET AL., *supra* note 11, at 77–84.

recommendations were similar to those being made by others, but the Connolly recommendations were more grounded in empirical findings (e.g., they set out an empirical basis for determining the length of the discovery period).

Predicting the impact of changes to discovery practice from information about the existing system is complicated by the fact that the legal system is so dynamic; changing one aspect of it may change other aspects in unanticipated ways. Research that evaluates the impact of changes to the system—either directly or indirectly, as with the simulation technique—may be needed.⁸⁰

Several studies directly evaluated some change to the system. One study described the effects of the 1970 amendments to the federal discovery rules, as measured by a survey of federal judges and a review of case law.⁸¹ Another looked at the effect of limiting the number of interrogatories parties may serve without leave of court, as measured by a survey of attorneys.⁸² In a more comprehensive study, Weller evaluated a program adopted in the Los Angeles Municipal and Superior Courts that eliminated interrogatories, severely limited the availability of depositions, limited the number of pretrial motions that could be filed and set time limits for cases in the program.⁸³ The study included case file reviews, interviews with court personnel and attorney questionnaires. The program had mixed effects—it reduced case-processing time, but attorneys felt that the inability to discover relevant evidence impaired the quality of both settlements and trials.

Research that describes the amount, type and cost of discovery activity can help evaluate whether, as some rule proposals assume, discovery-intensive or discovery-problematic cases can be identified early in the litigation process for tracking purposes. Additional research is needed, however, to determine whether the differential management of discovery-intensive cases curbs discovery problems without causing or exacerbating other problems in the system.

⁸⁰ Although he did not investigate any rule changes, Shapiro used the simulation technique to illustrate how particular ambiguities in Rules 26, 33 and 36 could cause serious role conflict for attorneys and result in widely divergent discovery practices. See David L. Shapiro, *Some Problems of Discovery in an Adversary System*, 63 MINN. L. REV. 1055, 1057–59, 1090–92 (1979).

⁸¹ See *Federal Discovery Rules: Effects of the 1970 Amendments*, 8 COLUM. J.L. & SOC. PROBS. 623, 623 (1972).

⁸² See JOHN SHAPARD & CARROLL SERON, FEDERAL JUDICIAL CTR., ATTORNEYS' VIEWS OF LOCAL RULES LIMITING INTERROGATORIES 1 (1994).

⁸³ Steven Weller et al., *ELP Revisited: What Happened When Interrogatories Were Eliminated?*, JUDGES' J., Summer 1982, at 10–11.